

AMENDMENTS TO THE CLAIMS

1.-18. **Cancelled**

19. **(Currently amended)** A method of identifying molecules that induce apoptosis, comprising screening compounds using ~~for~~ binding of said compounds to isotope-labeled Bcl-2 at the same site where TR3 binds, said site being different from the BH3-binding site on Bcl-2, said screening comprising:

interacting isotope-labeled Bcl-2 with said compound in an appropriate buffer system to form a complex; and
identifying where the compound is binding.

20. **Cancelled**

21. **(Previously presented)** A method of identifying molecules that induce apoptosis, comprising:

screening compounds to determine whether they bind to Bcl-XL labeled with an isotope at the same site where translationally controlled tumor protein (TCTP) binds, said site being different from the BH3-binding site on Bcl-XL, and

assaying any of said compounds which bind to Bcl-XL labeled with an isotope at the same site where TCTP binds to determine whether the compound induces apoptosis.

22. **Cancelled**

23. **(Previously presented)** A method for identifying molecules that induce apoptosis, comprising:

(a) providing a labeled Bcl-2 binding compound bound to Bcl-2 forming a complex, wherein said Bcl-2 binding compound is known to induce a conformational change in Bcl-2 so as to be inductive of apoptosis;

(b) contacting the Bcl-2 binding compound – Bcl-2 complex with a candidate agent, the candidate agent suspected of being able to induce a conformational change in Bcl-2 so as to be inductive of apoptosis, and

(c) detecting dissociation of the labeled Bcl-2 binding compound from the complex, and

(d) assaying the candidate agent to determine whether the candidate agent induces apoptosis.

24.-26. **Cancelled**

27. **(Previously presented)** The method of claim 23 wherein NMR is used to identify a structure-activity relationship (SAR) between said Bcl-2 and said candidate agent.

28. **(Currently amended)** The method of claim 21, wherein said screening is carried out using high throughput screening.

29. **(Previously presented)** A method for identifying molecules that induce apoptosis, comprising:

(a) detecting a labeled Bcl-X_L binding compound bound to Bcl-X_L, wherein said Bcl-X_L binding compound is known to induce a conformational change in Bcl-X_L so as to be inductive of apoptosis;

(b) contacting the Bcl-X_L binding compound – Bcl-X_L complex with a candidate agent, the candidate agent suspected of being able to induce a conformational change in Bcl-X_L so as to be inductive of apoptosis, and

(c) detecting dissociation of the labeled Bcl-X_L binding compound from the complex, and

(d) assaying the candidate agent to determine whether the candidate agent an agent that induces apoptosis.

30. **Cancelled**

31. **Cancelled**

32. **(Previously presented)** A method for identifying molecules that induce apoptosis, comprising:

(a) contacting Bcl-X_L with a candidate compound in the presence of a multidomain pro-apoptotic Bcl-2-family protein, and

(b) detecting the association of Bcl-X_L with such multidomain pro-apoptotic Bcl-2-family protein, whereby if association occurs, the candidate compound is identified as an agent that induces apoptosis.

33. **(Previously presented)** A method for identifying molecules that induce apoptosis, comprising:

(a) contacting Bcl-2 with a candidate compound and a BH3 specific antibody under conditions where the BH3 domain of Bcl-2 is not accessible to a BH3 specific antibody, and

(b) detecting the association of the BH3 specific antibody to the BH3 domain of Bcl-2, whereby if association occurs the candidate compound is identified as an agent that induces apoptosis.

34.-37. **Canceled**

38. **(Currently amended)** ~~The method of Claim 18~~ A method of identifying molecules that induce apoptosis, comprising:

determining the ability of said molecule to bind to the loop region of a Bcl-2-family protein and modulate the activity of said protein so as to be inductive of apoptosis, wherein said determining is by measuring the amount of labeled translationally controlled tumor-associated protein (TCTP) or TR3 bound to Bcl-2 family proteins anchored to a solid support in the presence and absence of molecules being tested, and determining the ability of each said molecules being tested to compete with TCTP or TR3 for binding sites on Bcl-2 family proteins.

39. **(Currently amended)** A method of identifying molecules that induce apoptosis, comprising:

screening compounds using ~~NMR~~ for binding of said compounds to isotope-labeled Bcl-XL at the same site where translationally controlled tumor-associated protein (TCTP) binds, said site being different from the BH3-binding site on Bcl-XL, comprising:

interacting isotope-labeled Bcl-XL with said compound in an appropriate buffer system; and

performing nuclear magnetic resonance (NMR) on said complex to identify where the compound is binding, whereby when said candidate compound binds at the same site where TCTP binds, which is different from the BH3-binding site on Bcl-XL, the candidate compound is identified as an agent that induces apoptosis.

40. **(Previously presented)** The method of claim 39, wherein said isotope is selected from the group consisting of ^{15}N , ^{13}C , and ^2H .

41. **(Previously presented)** The method of Claim 39, wherein said isotope is ^{15}N .

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42. **(Previously presented)** The method of Claim 19, wherein said isotope is selected from the group consisting of ^{15}N , ^{13}C , and ^2H .

43. **(Previously presented)** The method of Claim 19, wherein nuclear magnetic resonance (NMR) is used to identify where the compound is binding.

44. **(Previously presented)** The method of Claim 21, wherein said isotope is selected from the group consisting of ^{15}N , ^{13}C , and ^2H .

45. **(Previously presented)** The method of Claim 21, wherein nuclear magnetic resonance (NMR) is used to identify where the compound is binding.